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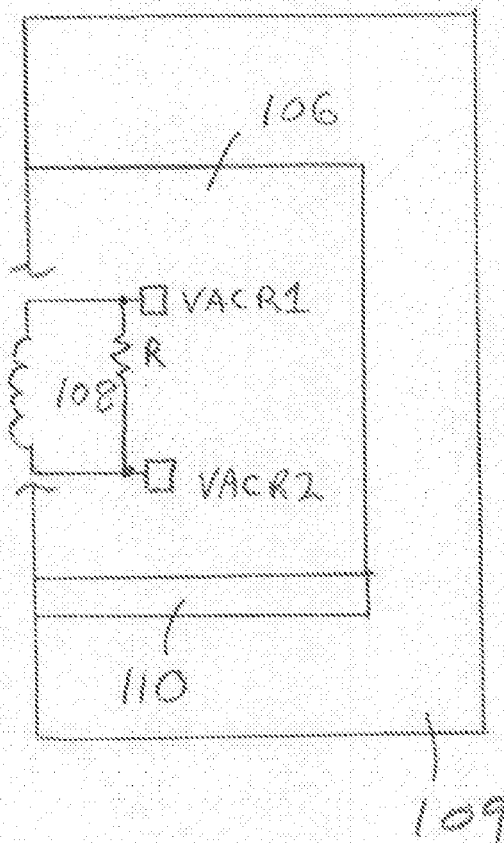
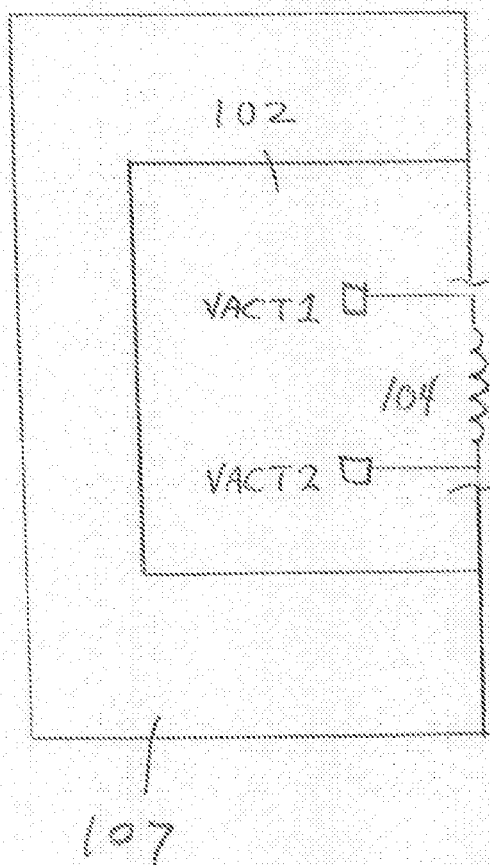
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(52) **U.S. Cl.** **455/41.1**(73) Assignee: **TRIUNE IP LLC**, Richardson, TX (US)(21) Appl. No.: **13/045,493**(22) Filed: **Mar. 10, 2011****Related U.S. Application Data**

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(57) **ABSTRACT**

Data transmission systems and methods are disclosed in which a transmitter and a receiver, each having an inductor, are configured for wirelessly transferring data and power between them. Error detection is implemented for implementing error correction techniques by making corrections at the receiver, at the transmitter, or both. In preferred embodiments of the invention, error correction approaches include oversampling, power adjustments, and frequency adjustments. In preferred implementations, the systems and methods are used for transmitting both power and data using a single pair of inductors.



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